



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,365	06/29/2001	Frederick Morello	491328-600-006	2229

7590 01/05/2010
Blaney Harper
Jones, Day, Reavis & Pogue
51 Louisiana Ave., N.W.
Washington, DC 20001

EXAMINER

CHAPMAN, JEANETTE E

ART UNIT	PAPER NUMBER
----------	--------------

3633

MAIL DATE	DELIVERY MODE
-----------	---------------

01/05/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/896,365	Applicant(s) MORELLO ET AL.	
	Examiner Jeanette E. Chapman	Art Unit 3633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14-20, 28-30, 33 and 34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-20, 28-30, 33-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1, 3, 31, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toti (4796393) in view of Knudson (4505084) and further in view of Lacasse (4358916)

Claim 1.

Toti discloses a building panel, comprising:

- (a) a curved central portion having a curved shape in cross section perpendicular to a longitudinal direction along a length of the building panel, the curved central portion having transverse corrugations therein;
- (b) a pair of side wall portions extending from opposite ends of said curved central portion in cross section, said curved central portion being concave-shaped in cross section from a perspective between said side wall portions, wherein said sidewall portions comprise straight portions that extend tangentially in cross section from the concave-shaped curved central portion; the building panel are curved in the longitudinal direction; Toti lacks the
- (c) a pair of complementary wing portions extending from said side wall portions. Knudson discloses the pair of complimentary wing portions enabling connection of various panels to form a single panel. knudson also discloses the building panel curved in the longitudinal direction. see figure 1 It would have been obvious to one of ordinary skill in the art to modify Toti to include the wing portion to enable connection of various panels to form a single.

Art Unit: 3633

Both panels of Toti and Knudson are curved in the longitudinal direction, but to show a different manner in which the panel are curved in the longitudinal direction; Lacasse discloses building panels curved in the longitudinal direction. It would have been obvious to one of ordinary skill in the art to modify the base reference to be curved in any direction to create an alternative design feature for the building construction

2.

(Canceled).

3.

Toti discloses the building panel of Claim 1, wherein said curved central portion comprises an arc.

claim 31:

Toti discloses the building panel curved in the longitudinal direction

Claim 33

Toti discloses the building panel of Claim 1, wherein the curved central portion is curved in cross section over an entire width of the curved central portion. See figure 2

Claim 1, 3-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knudson (4505084) in view of Toti (4796393) and Lacasse (4358916)

Knudson (figure 13) discloses a building panel, comprising:

- (a) a curved central portion, between 26 and 27, having transverse corrugations 57 therein;
- (b) a pair of side wall portions 26 and 27 extending from opposite ends of said curved central portion, said curved central portion being concave-shaped from a perspective between said side

Art Unit: 3633

wall portions, figure 13 wherein said sidewall portions comprise straight portions that extend tangentially from the concave-shaped curved central portion; and

(c) a pair of complementary wing portions 31/32 extending from said side wall portions.

Lacasse discloses a building panel (see figure 9), comprising:

(a) a curved central portion 330 having transverse corrugations therein; however,

(b) a pair of side wall portions 328 extending from opposite ends of said curved central portion, said curved central portion being concave-shaped from a perspective between said side wall portions, wherein said sidewall portions comprise straight portions that extend tangentially from the concave-shaped curved central portion; and

(c) a pair of complementary wing portions 329 extending from said side wall portions.

Lacasse discloses a building structure wherein said central portion is without a longitudinal stiffening notch; see figure 9.

Both panels of Toti and Knudson are curved in the longitudinal direction, but to show a different manner in which the panel are curved in the longitudinal direction; Lacasse discloses building panels curved in the longitudinal direction. See above. It would have been obvious to one of ordinary skill in the art to modify the base reference to be curved in any direction to create an alternative design feature for the building construction

See above for the disclosure of Toti.

claim 3.

Lacasse and toti discloses wherein said curved central portion comprises an arc .

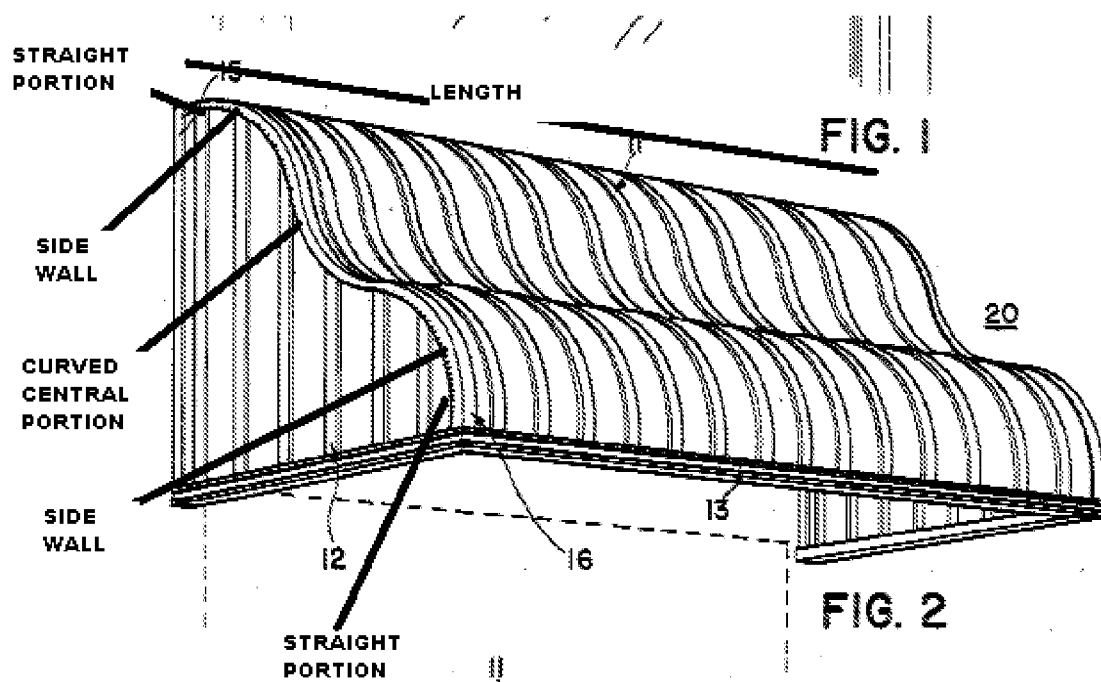
See above for the disclosure to Toti.

Art Unit: 3633

In view of the above: It would have been obvious to fashion the panel to have a curved shape in cross section perpendicular to a longitudinal direction along the length of the building panel and to include the arc central portion to construct a central portion that is easier to fashion as shown by the secondary references in order to easily vary the configuration of the panel.

claim 12.

Knudson and Lacasse discloses a building panel wherein said side wall portions extend at an incline from said opposite ends of said curved central portion.



claim 4.

Knudson discloses the building panel of Claim 3, wherein said arc ranges from 15° to 130°, specifically 55-60 degrees.

claim 5.

Knudson discloses the building panel of Claim 3, wherein said arc ranges from 40° to

Art Unit: 3633

130°, specifically 55-60 degrees; alternatively,
claims 4-7

In column 8, the second table discloses angles between 15 and 130 degrees. The arc angles has been considered a matter of choice. One of ordinary skill in the art would have appreciated an arc angle commensurate with the intended design and function of the panel

claims 8-11

adding up all the radii shown in the tables of column 7 and columns 10-11 the arc has a radius ranging from 4 inches to 25 inches. The arc radius has been considered a matter of choice. One of ordinary skill in the art would have appreciated an arc radius commensurate with the intended design and function of the panel

Claim 14-15, 17-20, 28-30, 32,34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knudson (4505084) in view of Toti (4796393) and Lacasse (4358916) and Karoubas (4579785) and further in view of Haines et al (5020295)

Claims 14-15, 17, 20, 28

Knudson discloses a building panel comprising:

(a) a curved central portion 25 having transverse corrugation therein; Karoubas discloses corrugations extending in both directions transverse and coextensive; one's reference point determines the transverse and coextensive direction. It would have been obvious to include one, either or both directions for the corrugations in order to improve stiffening or buckling of the building panel

(b) a pair of side wall portions 26,27 extending from opposite ends of said curved central portion, said curved central portion being concave-shaped from a perspective between said side wall

Art Unit: 3633

portions, wherein said sidewall portions comprise straight portions that extend tangentially from the concave-shaped curved central portion; wherein said side wall portions extend at an incline from said opposite ends of said curved central portion.

(c) a pair of complementary wing portions 28,29 extending from said side wall portions. One of said wing portions comprises a hook portion 32 and the other of said wing portions comprises a hem portion 31. alternatively stated a pair of wing portions extending from said side wall portions, wherein one wing portion extends from a first of said side wall portions and the other wing portion extends from a second of said side wall portions, wherein said one wing portion from a first of said panels is connected to said other wing portion from a second of said panels. See figures 3-5 of Knudson.

See above for the claimed subject matter of Toti

Both panels of Toti and Knudson are curved in the longitudinal direction, but to show a different manner in which the panel are curved in the longitudinal direction; Lacasse discloses building panels curved in the longitudinal direction. Haines et al also shows a building panel curved in the longitudinal direction. It would have been obvious to one of ordinary skill in the art to modify the base reference to be curved in any direction to create an alternative design feature for the building construction

claim 17

Lacasse discloses a building structure wherein said curved central portion comprises an arc.

For claims 18-19

In column 8, the second table discloses angles between 15 and 130 degrees. The arc angles has been considered a matter of choice. One of ordinary skill in the art would have appreciated an arc

Art Unit: 3633

angle commensurate with the intended design and function of the panel

By adding up all the radii shown in the tables of column 7 and columns 10-11 the arc has a radius ranging from 4 inches to 25 inches. The arc radius has been considered a matter of choice.

One of ordinary skill in the art would have appreciated an arc radius commensurate with the intended design and function of the panel.

More specifically, in view of the above: It would have been obvious to fashion the panel to have a curved shape in cross section perpendicular to a longitudinal direction along the length of the building panel , to include the arc central portion that is easier to fashion and to easily vary the configuration of the panel as shown by the secondary references.

Claims 29-30:

Knudson discloses a curved building structure wherein said central portion is without a longitudinal stiffening notch.

Claims 31-32:

Knudson discloses the building panel is curved in a longitudinal direction see figure 13.
claim 34.

Toti discloses the building structure of Claim 15, wherein the curved central portion is curved in cross section over an entire width of the curved central portion.

Applicant's arguments are moot in view of the new ground of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chapman E. Jeanette whose telephone number is 571-272-6841. The examiner can normally be reached on Mon.-thursday, 8:30-6:00, every fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Dunn can be reached on 571-272-6670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JEANETTE CHAPMAN/
PRIMARY EXAMINER
ART UNIT 3633